### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s):

Michael Wandell et al.

Examiner:

Lore Ramillano

Application No.:

10/706,321

Art Unit:

1797

Filing Date:

November 12, 2003

Docket No.:

36664.00.0013

Confirmation No.: 6492

Title: QUANTITATIVE ANALYSIS OF A BIOLOGICAL SAMPLE OF

**UNKNOWN QUANTITY** 

Mail Stop AF Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

### PRE-APPEAL BRIEF

Dear Sir:

Pre-Appeal is respectfully requested. Applicant files this Pre-Appeal Brief along with a Notice of Appeal. Pre-appeal review is the proper recourse when a rejection is based either on a clear error in law or when the Examiner fails to set forth a prima facie case against patentability, omitting one or more elements or limitations required in a claim. See OG Notice, July 12, 2005, New Pre-Appeal Brief Conference Pilot Program. In this case, the Examiner argues as part of the prima facie case that by drawing a small circle using a pen on a flat, continuous sheet of paper, an "aperture" having a "blood receiving opening" is created in the paper.

As a reminder, all remaining claims (claims 4-15, 20-21, and 42) stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Quattrocchi (U.S. Patent No. 6,014,438) in view of Fitzgerald et al. (U.S. Patent No. 6,528,321). Claims 4, 6, and 42 are independent and include the aperture and opening discussed hereafter as part of claim 4. Applicant has made several. arguments during prosecution, and these substantive arguments are reserved for the appeal process. The Examiner's confusion as to how drawn marks can be apertures is particularly adapted to the pre-appeal process as being an abuse of discretion. Claim 4 provides the following:

4. A fluid collection device comprising a fluid collector with an absorbent substrate coated with a saccharide, said substrate comprising a mat of glass fibers at least substantially coated with polyvinyl alcohol, said fibers defining a plurality of pores, the pores in said mat having a pore size effective to at least substantially prevent lysing of red blood cells while permitting at least substantial separation of serum from red blood cells via differential wicking and a superstrate, said fluid collector being generally fixed with respect to said superstrate, said superstrate having an aperture defining a blood receiving opening and permitting access to said fluid collector.

Applicant's Fig. 9 reproduced below illustrates the fluid collection device 900 where two fluid collectors 903 and 904 are disposed over a fixed superstrate 905. Two apertures 909 and 910 allow users to prick their fingers and place the bleeding finger on the fluid collector directly through what is called blood-receiving openings. The shaded portion between the large arrows is tainted with blood from the finger, and as the blood migrates up the fluid collectors, a user will see a portion of the fluid collector through the secondary apertures turn red 911, 912 with blood. On this device, small strips are used and stabilized using the superstrate.

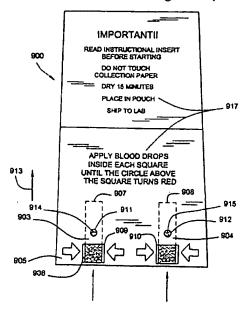
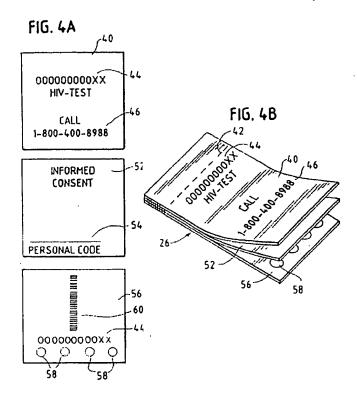


Fig. 9 of Application No. 10/706,321

In the *prima facie* case, the Examiner cites U.S. Patent No. 6,014,438 (Quattrocchi). Quattrocchi is a decade-old technology owned by Applicant. Figures 4A and 4B of the fluid collection device of that reference are shown below.



This older technology is simpler and has obvious disadvantages. Subsequent to a request for reconsideration, Applicant brought the following portion of the Quattrocchi specification to the attention of the Examiner in a phone conversation:

FIGS. 4A and 4B schematically illustrate one form of blood specimen collection card 26 which is preferably configured in a diagnostic form having three (3) parts. The first part is a removable top sheet 40. Perforations 42 are preferably provided to enable the person being tested to remove the top sheet 40 from the remainder of the collection card 26. Printed on the top sheet 40 is information that the person being tested needs to retrain after the remainder of the collection card 26 is sent for analysis. Col. 6, II. 54–63.

The second part of collection card 26 is an informed consent form 52. The informed consent form 52 contains a series of statements that the person being tested must read, understand, and acknowledge before a laboratory can perform any test on the specimen. Col. 7, Il. 23–26.

In its illustrated form, the third part of collection card 26 is a blood specimen sample sheet 56. Sample sheet 56 is at least in part a cotton fiber filter paper preferably like that manufactured by Schleicher and Schuell. Sample sheet 56 has a blood collection area specifically designated thereon. In the illustrated embodiment, four similarly shaped sections 58 are outlined thereon for deposit of a specimen in each section. The sections 58 are outlined using black biological ink so that the ink will not interfere with the specimen and an accurate test result can be obtained. Col. 7, Il. 32-42 (emphasis added).

The old technology requires the entire sheet to be made of expensive blood-retaining media. Ink circles are drawn on a flat piece of paper, and users were required to place the finger in the circle and try to get the blood to diffuse over the entire area of the circle. There is no built-in protection for the blood sample, and it would then be mailed and rub directly against other bodies during transportation. Once at the laboratory, a circular punch system was used to remove the surface area inside the ink circles to collect the part of the substrate to dilute for measurement. If part of the circle was still white, the measure would be skewed.

The Examiner's position is best summarized by the continuation comment to the Advisory Action of September 11, 2008: "the Office takes the position that specimen sections (58) may be broadly interpreted to be openings. Furthermore, it appears that Quattrocchi's apertures read on applicant's apertures since applicant's apertures, like Quattrocchi, are filled with the fluid collector material, which includes an absorbent substrate."

During patent examination, pending claims must be given their broadest reasonable interpretation consistent with the specification. *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005). Words of a claim must be given their plain meeting unless this meaning is inconsistent with the specification. *In re Zletz*, 893 F.2d 319 (Fed. Cir. 1989). The *Merriam-Webster's Collegiate Dictionary*, 10th ed. defines "aperture" as an opening or open space: hole. In turn, "opening" is defined as something that is open. (See Exhibit A attached hereto).

In *Mechanics of Patent Claim Drafting*, 2nd. ed., Landis explains, "Do not claim holes positively or make them claim elements. Holes are nothing; you cannot claim nothing. Claim "a [member] having a hole, groove, slot, aperture, etc." Section 23. A copy of the relevant pages from this reference is attached as Exhibit B. Applicant respected this suggested format to claim the hole as an aperture of the superstrate and wrote, "... said superstrate having an aperture defining a blood receiving opening and permitting access to said fluid collector." The claim language is perfectly clear.

The Examiner confuses a structure having a fluid collector, a substrate, and a superstrate, with the aperture on the superstrate. Quattrocchi is a structure with a fluid collector and a superstrate and no apertures on either the fluid collector or the substrate.

Rules are given to the Examiner if she wants to constitute a valid *prima facie* case where ink circles constitute apertures. She must either prove that Applicant's specification supports this particular meaning—that the plain meaning of these words support this interpretation—or that one of ordinary skill in the art agrees with the Examiner. MPEP § 2111. The position taken by the Examiner is contrary to almost every patent claim recorded with this Office. Apertures and openings in a media are precisely that: an aperture or an opening. Applicant asks this Board under what possible circumstance can writing or printing the number 8 on a piece of paper result in an apparatus with two apertures or two openings?

The use of the term "aperture" and "opening" is well established under modern patent practice. Apertures and openings are normal terminology used to claim holes. The plain meaning of these words is well known and unambiguous. Quattrocchi is a device with a fluid collector without neither an aperture nor an opening. The Examiner's position is contrary to common sense and patent law. The Examiner cannot argue that Applicant's apertures should be broadly construed to include surface areas within ink circles. Accordingly, Applicant requests reconsideration and withdrawal of the rejection and issuance of a Notice of Allowance for all claims.

Respectfully bibruitted,

Date: September 23, 2008

By: Alain Villeneuve, Reg. No. L-215

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fax: (312) 609-5005



# Merriam-Webster's Collegiate® Dictionary

TENTH EDITION

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anx-i-ety \an-'zi-z-te\ n, pl-eties [L anxietas, fr. anxius] (ca. 1525) 1 a : painful or apprehensive uneasiness of mind usu. over an impending or anticipated ill b: fearful concern or interest c: a cause of anxiety 2 : an abnormal and overwhelming sense of apprehension and fear often marked by physiological signs (as sweating, tension, and increased pulse), by doubt concerning the reality and nature of the threat, and by self-doubt about one's capacity to cope with it syn sec CARE anxi-o-lyt-ic \an-ze-o-'li-tik, an(k)-se\ n [anxiety + -o- +-lytic] (1965) : a drug that relieves anxiety — anxiolytic adj anxi-tors \angle anxi-tors \angle anxi-tors \angle anxi-tors \angle anxi-tors \angle anxiety = to real anxiety and \angle anxiety \

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hazard manner 2 a: at any rate b: in any event any-more \( e-ne-mor, -mort \) adv \( (140) 1: any longer \) (I was not moving \( \sim \text{ with my leet} - Anais \text{ Nin} \) 2: at the present time: NOW \( \text{ hardy ly a day passes without rain \( \sim \) usage Although both anymore is the more common styling. Anymore is regularly used in negative \( (no one can be natural anymore - May Sarton), interrogative \( (do you read much anymore? \), and conditional \( (if you do that anymore, !\) Ill leave) contexts and in certain positive constructions \( (the Washingtonian is too sophisticated to believe anymore in solutions - Russell Baker). In many regions of the U.S. the use of anymore in sense 2 is quite common in positive constructions, esp. in speech \( (\) everybody's cool anymore - Bill White) \( (\) every time we leave the house anymore, !\) play a game called 'Stump the House-breaker' — Erma Bombeck). The positive use appears to have been of Midland origin, but it is now reported to be widespread in all speech any-one \( (1-36) : any person at all \) any-one \( (1-36) : any person at all \) any-place \( \- \- \- ne\_i \) (196) : in any place : ANYWHERE \( \) any-time \( \) (2-ne\_i - (1m) \( adv \) (196) : at any time whatever : any such thing 'anything \( adv \) (13c) : 1: ANYWISE \( 2 : \) in any case : ANYHOW any-ways \( \- \- wazs \) (3c) \( 1 : any time \( (1-36) \) any degree at all \( 2 \chin \) (13c) : any time \( (1-36) \) any extent: \( (1-36) \) (13c) : any where \( \- (1) \) (13c) : any ylonge \( (1-36) \) (13c) : any way whatever \( (1-36) \) (13c) : any way ways \( (1-36) \) (13c) : any way whatever \( (1-36) \) (13c) \(

any-wheres \-\(n\)werz, -\(n\)werz, -\(n\)werz\ adv (1775) chiefly dial : ANYWHERE
any-wise \(\forall^{-1}\)werz, -\(n\)werz\ adv (13c): in any way whatever: AT ALL
Anzac \(\frac{1}{2}\)an-zak\ n [Mustralian and New Zealand Army Corps] (1915): a soldier from Australia or New Zealand
A-OK \(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)n-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\frac{1}{4}\)a-\(\fra

à ou-trance \=,0-trans\ adv [F] (1883) : to the limit : UNSPARINGLY

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'ap — see APO—

apace \(\frac{1}{2}\) pa\(\frac{1}{2}\) adv \(\frac{1}{2}\) ME. prob. \((\frac{1}{2}\) med on step\) (14c) 1: at a quick pace: \(\frac{1}{2}\) SWIPTLY 2: ABREAST — used with \(\frac{1}{2}\) for \(\frac{1}{2}\) adults \(\frac{1}{2}\) pache, \(\frac{1}{2}\) in \(\frac{1}{2}\) and \(\frac{1}{2}\) Apache \(\frac{1}{2}\) pache, \(\frac{1}{2}\) in \(\frac{1}{2}\) (1745) 1: a member of a group of American Indian peoples of the southwestern U.S. 2: any of the Athabascan languages of the Apache people 3 not \(\cap a\) (2; any of the Athabascan languages of the Apache people 3 not \(\cap a\) (2; in Pache Apache Indian) a: a member of a gang of criminals esp. in Paris b: RUFFIAN — Apache
an \(\frac{1}{2}\)-'pache-an\(\frac{1}{2}\) and \(\frac{1}{2}\) or \(\frac{1}{2}\)-'pache-an\(\frac{1}{2}\) and \(\frac{1}{2}\) or \(\frac{1}{2}\).

the mage var of APPANAOR

the rejo \a-pa-'rā-(,\th)ō\ n, pi -jos [AmerSp] (1844): a packsaddle of stuffed leather or canvas

\*apart \phi-part\ adv [ME, fr. MF a part, lit., to the side] (14c) 1 a: at a little distance (tried to keep \phi from the family squabbles) b: away from one another in space or time (towns 20 miles \phi) 2 a: as a separate unit: INDEPRINDENTLY (viewed \phi, his arguments were unsound) b: so as to separate one from another (found it hard to tell the twins \phi) 3: excluded from consideration: AsIDE (a few blemisher \phi, the novel is excellent) 4: in or into two or more parts: to pieces (coming \phi at the seams) es ~, the novel is excentur,
es (coming ~ at the seams)
apart adj (1786) 1: SEPARATE, ISOLATED 2: holding different opinions: DIVIDED — apart-ness n
then RESIDES

'apart adi (1786) 1: SEPRATE, ISOLATED 2: holding different opinions: DNVIDED — apart-ness n : BESIDES spart-bed (1947) 1: racial segregation; specif: a policy of segregation and political and economic discrimination against non-European groups in the Republic of So. Africa 2: SEPRATION, SEGREGATION (1 favor ~ of smokers — L. E. Bellin) (sexual ~ > papart-ment \sigma-rimant\) n [I appartement, fr. It appartamento] (1641) 1: a room or set of rooms fitted esp. with housekeeping facilities and usu. leased as a dwelling 2: a building containing several individual apartments — apart-ment-fal \sigma-p\frac{1}{2} = \text{building containing several individual apartment hotel n (1909): a hotel containing apartments as well as accommodations for transients apartment bouse n (1874): a building containing separate residential apartments — called also apartment building apa-athet-le \sigma-ps-the-tik adj (1744) 1: having or showing little or no feeling or emotion: SPIRTLESS 2: having little or no interest or concern: INDIFFERENT syn see IMPASSIVE — apa-thet-l-cal-ty \times (2-)\tilde do'

apa-athy \sigma-p-the\tilde n (Gk apatheia, fr. apath\tilde synthetic feeling, fr. a-

k(2-)lé\adv

ap-a-thy\a-p--thè\n [Gk apatheia, fr. apathès without feeling, fr. apatins runtion — more at PATHOS] (1603) 1: lack of feeling or emotion: IMPASSIVENESS 2: lack of interest or concern: INDIFFERENCE

ap-a-tite \a-p--,til\n g G Apatit, fr. Ck apaté deceil] (1803): any of a
group of calcium phosphate minerals occurring variously as hexagonal
crystals, as granular masses, or in fine-grained masses as the chief constituent of phosphate rock and of bones and teeth; exp: calcium phosphate fluoride

phate fluoride aparto-su-rus \2-,pa-ta-'sor-os\ n [NL, [r. Gk apatē + sauros |zzard] (ca. 1899): BRONTOSAURUS

'ape '\forallo n [ME, [r. OE apa; akin to OHG affo ape] (bef. 12c) 1 a: MONKEY: exp: one of the larger tailless or short-tailed Old World forms b: any of two families (Pongidae and Hylobatidae) of large tailless semiercet primates (as the chimpanzee, gorilla, orangutan, or gib-bon) — called also anthropoid, anthropoid ape 2 a: MIMIC b: a large uncouth person — ape-like \\^iap-\lik\ adj\\^iap-\lik\ adj\\^iape vt aped; ap-ling (1632): to copy closely but often clumsily, and inceptly syn see COFY — ap-er n ape syn see COFY — ap-er n ape syn see COFY — ap-er n in the phrase syn ape in the phrase syn ape in the phrase syn ape syn see COFY — ap-er n aper syn see syn see

"ape ad (ca. 1955): being beyond restraint: CRAPY, WILD — usu, used in the phrase go ape apeak \a-'pēk\ adj or adv [alter. of earlier apike, prob. fr. F à pic vertically] (1956): being in a vertical position (with oars ~) ape—man '\frac{1}{2}p\_man, .\frac{1}{2}man\ n (1879): a primate (as an australopithecine) intermediate in character between Homo sapiens and the higher

ape-man \\approx\_man, \cdot \text{"man} \( n \) (1879): a primate (as an australopithecine) intermediate in character between Homo sapiens and the higher apes
aper-cu \( \alpha \) -per-s\( \alpha \), \( \alpha \) perceive, \( \frac{n}{2} \), \( \frac{n}{2} \) \( \frac{n}{2} \), \( \frac{n}{2} \) \( \frac{n}{2} \), \( \frac{n}{2} \) \( \frac{n}{2} \), \(

impairment of the power to use or comprehend words usu. resulting from brain damage — apha-sic \-zix\ n or adj aph-elion \a-!fēl-yon\ n, pl -elia \-yo\ [NL, fr. apo- + Gk hēlios sun — more at SOLAR] (1656): the point in the path of a celestial body (as a planet) that is farthest from the sun — compare PERIHELION

\a\ abut \a\ kitten, F table \ar\ further \a\ ash \a\ ace \a\ mop, mar \au\ out \ch\ chin \c\ bet \c\ easy \g\ go \ti\ hit \i\ loc \ti\ lob \q\ so \si\ foot \ti\ boy \th\ thin \th\ the \ti\ loot \u\ foot \y\ yet \zh\ vision \a, k, ", ce, ce, te, te, \te, \te}, see Guide to Pronunciation

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as a : enterable by both amateur and professional contestants (an ~ tournament) b : enterable by a registered voter regardless of political affiliation (an ~ primary) 6 : fit to be traveled over : presenting no obstacle to passage or view (the ~ road) (~ country) 7 : having the parts or surfaces laid out in an expanded position : spread out : UNFOLDED (an ~ book) 8 s (1) : Low 13 (2) : formed with the tongue in a lower position (Italian has an ~ and a close e) b (1) : having clarity and resonance unimpaired by undue tension or constriction of the throat (an ~ vocal tone) (2) of a tone : produced by an open string or on a wind instrument by the lip without the use of slides, valves, or keys 9 a : available to follow or make use of (the only course ~ to us) b : not taken up with duties or engagements (keep an hour ~ on Friday) c : not finally decided : subject to further consideration (the salary is ~) (an ~ question) d : available for a qualified applicant : VACANT (the job is still ~) e : remaining available for use or filling until cancelèd (an ~ order for more items) f : available for future purchase (these items are in ~ stock) 10 a : characterized by ready accessibility and usu generous attitude: as (1) : generous in giving (2) : willing to hear and consider or to accept and deal with : RESPONSIVE (3) : free from reserve or pretense: FRANK b : accessible to the influx of new factors (as foreign goods) (an ~ market) 11 a : having openings, interruptions, or spaces (~ mesh): as (1) : being porous and friable (~ soil) (2): sparsely distributed : SCATTERED (~ population) (3) of a compound : having components separated by a space in writing or printing (as opaque projector) b : not made up of a continuous closed circuit of channels (the insect circulatory system is ~) 12 a of an organ pipe: not stopped at the top b of a string on a musical instrument : not stopped by the finger 13 : being in operation (an ~ melrophone); esp : ready for business, patronage, or use (the store is ~ low set) by lack of effective reg

LIABLE — open adv — open-ly \\^o-pon-le\\\ adv — open-ness \\^po(n)-ns\\ n \\
12c) 1 a: to move (as a door) from a closed position b: to make available for entry or passage by turning back (as a barrier) or removing (as a cover or an obstruction) 2 a: to make available for or cactive in a regular function \( \sim a new store \) b: to make accessible for a particular purpose \( \sim d new land for settlement \) \( < \lambda \) the way for changes \( > i \) to initiate access to (a computer file) prior to use 3 a: to disclose or expose to view: RBVBAL b: to make more discerning or responsive: BNLIGHTEN \( \mu ust \sim \) our minds to the problems \( > i \) to make an opening in \( \lambda = d \) the boil\( > b \) is to sposen and make less compact \( \lambda \) the soil \( > i \) site of the meeting \( > b \): to commence action in a card game by making (a first bid), putting a first bet in (the pot), or playing (a card or suit) as first bid), putting a first bet in (the pot), or playing (a card or suit) as first lead 7: to restore or recall (as an order) from a finally determined state to a state in which the parties are free to prosecute or oppose \( \sim i \) 1: to become open (the office \( \sim d \) each of the soil \( > b \); to spread out: EXPAND (the wound \( \sim d \) under the strain\( > b \); to become disclosed (a beautiful vista \( \sim d \) force on the subject) \( 6 a \) at 10 begin a course or activity (the play \( \sim o \) or Tuesday \( > b \); to make a bet, bid, or lead in commencing a round or hand of a card game \( \sim o \) open and (15c) 1: open and unobstructed space: as

pa-\adj

\*\*open n (13c) 1: OPENING 2: open and unobstructed space: as a

\*\*open n (13c) 1: open water 3: an open contest, competition, or tour
nament 4: a public or unconcealed state or position

open admission n (1969): OPEN ENROLLMENT 2

open-air adj (1830): OUTDOOR

open air n (15c): the space where air is unconfined; exp: OUTDOORS

open-and-shut adj (1841) 1: perfectly simple: OBVIOUS 2: easily

\*\*settled (ap. CASE)

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open—end-ed \o-pon-ien-dad adj (1825): not rigorously fixed: as a
: adaptable to the developing needs of a situation b: permitting or designed to permit spontaneous and unguided responses — open—ended-ness n

ed-ness n. open enrollment n (1964) 1: the voluntary enrollment of a student in a public school other than the one assigned on the basis of residence 2: enrollment on demand as a student in an institution of higher learning irrespective of formal qualifications

open-er \'\"op-nar, \"o-po-\ n (15c) : one that opens (a bottle \( \rightarrow\); a : cards of sufficient value for a player to open the betting in a pagame b: the first item, contest, or event of a series — for opens begin with

desired end open shop n (1903): an establishment in which eligibility for employment and retention on the payroll are not determined by membrable or nonmembership in a labor union though there may be an agreement by which a union is recognized as sole bargaining agent open stight n (1591): a firearm rear sight having an open notch open stance n (1948): a stance (as in golf) in which the forward total farther from the line of play than the back foot — compare CLOSD STANCE

stance open syllable n (1891): a syllable ended by a vowel or diphthons open up vs (1582) 1: to make available 2: to make plain or right open up vs (1582) 1: to open by cutting into ~vis 1: to spread out a cost into view (the road opens up ahead) 2: to commence firing 3: who come communicative (tried to get the patient to open up) open-work (\footnote{Open-work}, often attrib (1598): work constructed as to show openings through its substance: work that is perforate spierced (wrought-iron ~) — open-worked \, workt\ adj

opera house n (1709): a theater devoted principally to the period of operas; broadly: THEATER operand \(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{1}{2}\)-perand\(\frac{

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## MECHANICS OF PATENT CLAIM DRAFTING

Second Edition

**Eighth Printing** 

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popper and is to be so claimed, and that the holes in the container (Fig. 1) are important and must be defined. Clause (a) of Claim 1 might read:

A container for receiving kernels of corn to be popped, the container having a perforated bottom with apertures smaller in size than the kernels;

Other examples of expressions defining features of elements:

a disc of resilient material having a peripheral groove . . .

a relay having two windings...

a lever having a forked end and a rounded end . . . [If only the forked end is important to the combination being claimed, do not mention the rounded end.]

a gear of electrically insulating material.

If an element by definition inherently includes a certain feature, such feature need not be recited and it is proper to refer, without previous mention, to such features as:

the end of the lever . . the periphery of the disc . . . the tines of the fork ...

In case of doubt, positively describe the feature or part.

SUMMARY-Select those parts or features of each element that are essential to the combination being claimed. Then, describe them in a logical order, preferably following the main description of the element in the same clause of the claim. How many features need to be described and how broadly each should be recited is a matter of claim scope (based largely on the prior art), but the principles are the same as used in selecting the elements and naming them.

#### Section 23—Claiming Holes

In the situation where a hole is to be described it must not be recited positively. That is, instead of stating "a hole, groove, aperture, recess, slot, etc., in the lever," one must state "... the lever having a hole, groove, etc." Thereafter, one can refer to "the hole" or "said hole." This "rule" may seem to make little sense, but it is another founded in antiquity like the single-sentence rule. Maybe someone thought that a hole is nothing—and people shouldn't claim nothing?

Another approach to describing holes is an expression such as "... the level having portions defining a hole, groove, etc." The hole is thus defined in terms of the structure which forms it.

One case *In re Newton*, 163 USPQ 34 (CCPA 1969), held that it was proper to claim a hole and its function as a means for performing a function, specifically "means for providing fluid communication between . . . [two members]."

SUMMARY—Do not claim holes positively or make them claim elements. Holes are nothing; you cannot claim nothing. Claim "a [member] having a hole," groove, slot, aperture, etc.

### Section 24—Order of Elements

The elements of the claim should be presented in some logical order. Often, there are several orders that make sense, and any one may be selected. The order used in Claim 1 is a "functional" order, starting with the element which first contacts the workpiece (the container) and proceeding along functional lines to describe the remaining elements.

Another order which is often used is a "structural" order, starting first with the base, or the source of power, and proceeding along structural lines to describe the remaining elements. In structural order, Claim 1 would read:

1B. Apparatus for shaking articles, which comprises:

(a) a base;

(b) a plurality of parallel legs, each of which is con-

nected pivotally at one end of the base;

(c) a container for the articles connected pivotally to the other ends of the legs, so that the legs support the container for oscillating movement with respect to the base; and It : ment: struct low. logica drive: start of the one p start a Lt : cult to mean:

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